

Work Order ID 150686

Monday, August 29, 2016 3:00:53 PM

150686

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Item ID: D206-648-013 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Ground Handling Wheel Modification
 Start Date: 8/23/2016 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 8/29/2016 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: **DAS 21** Date: **AUG 30 2016** Tooling: Date: Run Start ***NR1***
 QC: **9-89** Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D206-648	Rev B	DAS 6 9-89	OCT 1 8 2016					DAS 21 9-89	16-10-19
100	Document Control	0.00							
100									
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile and create labels per PPP D206-648-013 CHG002								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.01							
Quality Control									

2X **DAS 27**
9-89
NOV 01 2016

2 **DAS 6**
9-89 **DAS 28**
9-89 **OCT 1 8 2016** **DAS 28**
9-89

2 **DAS 27**
9-89
NOV 01 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Temperature/Cure ☐		Power Loss/Surge ☐	
Design ☐		Operator ☐		Set-up ☐		Folio/Program ☐	
Doc/Data ☐		Offset/Setup ☐		BOM/Route ☐		Grain ☐	
Equip/Tooling ☐		Supplier ☐		Broken/Damage/Defect ☐		Weld ☐	
Handling/Pre ☐		Training ☐		Inspection Incomplete/Unqualified ☐		Wrong Stock Pulled ☐	
Material ☐		Use for Testing ☐		Contamination ☐		Out of Sequence ☐	
Internal Transport ☐		Poor Information ☐		Countersink ☐		Off-set ☐	
Tribal Knowledge ☐		Rushing ☐		Cut Too Short ☐		Mislabeled ☐	
LOA ☐		Product Improvement ☐		Instructions Incomplete/Unclear ☐		Fit/Function ☐	
Substation ☐		Process Improvement ☐		Drill Holes ☐		Misaligned/off center ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

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Start Date: 8/23/2016 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 8/29/2016 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130									
Packaging	Memo	0.00		51636	2X	DAS 27 9-89	DAS 28 9-89		
Packaging	Identify and pack for shipping as per PPP D206-648-013								NOV 01 2016
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.03				DAS 21 9-89			NOV 01 2016
Quality Control									
						DAS 21 9-89			NOV 01 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework ☐		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
NCR No. _____		Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Use-as-is ☐		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Suspected Unapproved ☐		Large Fab ☐	Composite ☐	Supplier ☐			
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

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Work Order ID: 150686

150686

Parent Item: D206-648-013

D206-648-013

Parent Item Name: Ground Handling Wheel Modification

Start Date: 8/23/2016

Required Date: 8/29/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A05.09.23New issueKJ/JLM
IPP Rev:B 07-12-05 ECN 1080p DD verified by:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2652		Manufactured	No			110	Each	370.0000	8	16			
D2652									**	149380		OCT 18 2016	DAS 28 9-89
Bushing													

Location	Loc Qty	Loc Code
FG	45	
31985	45	
ST008A	325	
148315	325	

D3414-041		Manufactured	No			110	Each	14.0000	2	4			
D3414-041									**	145898 x2		OCT 18 2016	DAS 28 9-89
Lug													

Location	Loc Qty	Loc Code
ST531	14	
136607	6	
148302	8	

AN3C37A		Purchased	No			110	Each	230.0000	4	8			
AN3C37A									**			OCT 18 2016	DAS 28 9-89
BOLT													

Location	Loc Qty	Loc Code
OVER002	210	
M131856	70	
M132169	70	
M132381	70	
ST347	20	
131651	20	

DQA: _____ Date: _____



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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
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Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							

Picklist Print

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Work Order ID: 150686

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Parent Item: D206-648-013

D206-648-013

Parent Item Name: Ground Handling Wheel Modification

Start Date: 8/23/2016

Required Date: 8/29/2016

Start Qty: 2.00

Required Qty: 2.00

NAS1149C0363R

Purchased

No

110

Each

478.0000

4

8

NAS1149C0363R

Washer

OCT 18 2016

DAS 6 28
9-89 9-89

135672

DAS 27
9-89

Location

Loc Qty

Loc Code

FP001

265

114742

6

m133077

259

GA

213

m133077

213

MS21043-3

Purchased

No

110

Each

824.0000

4

8

MS21043-3

Nut

OCT 18 2016

DAS 6 28
9-89 9-89

135544

DAS 27
9-89

Location

Loc Qty

Loc Code

FG

80

103691

80

FP001

11

m130673

11

GA

237

m133990

237

OVER007

400

m134861

0

m135442

400

ST302

27

m135058

27

ST304

69

m131340

69

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Shop Packet Print

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DQA: _____ Date: _____



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Part No. _____		Rework ☐		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
NCR No. _____		Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Use-as-is ☐		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☒		
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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
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Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

REFERENCE ONLY

FOR INSTALLATION INSTRUCTIONS/REQUIREMENTS AND TECHNICAL INFORMATION SEE APPLICABLE
DART INSTALLATION INSTRUCTIONS.

QTY -011	QTY -013	PART NUMBER	DESCRIPTION
X		D206-648-011	GROUND HANDLING KIT
	X	D206-648-013	GROUND HANDLING KIT
8	8	D2652	BUSHING
2		D2659	GHW LUG
	2	D3414-041	LUG ASSEMBLY
4		AN3-37A	BOLT
	4	AN3C37A	BOLT
	4	AN960C10	WASHER
4		AN960JD10	WASHER
4		MS21042-3	NUT (OR MS21042L3)
	4	MS21043-3	NUT

RELEASED
09/12/16

B	INSTALLATION AND WEIGHT AND BALANCE INFORMATION TRANSFERRED TO DART INSTALLATION INSTRUCTIONS D206-642. ALL HARDWARE UPDATED TO SS HARDWARE.	AJS	08.09.24
A	NEW ISSUE	JB	97.11.03
REV.	DESCRIPTION	BY	DATE
DESIGN	JB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.	N/A	D206-648	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		GND HANDLING WHEEL (GHW) INSTL	NONE
DATE	08.09.24	COPYRIGHT © 1997 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	